WORLD RESEARCH IN ALCOHOLISM

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Authors of research in alcoholism are invited to supply the Research Editor with two reprints of their publication for the LIBRARY OF WORLD RESEARCH IN ALCOHOLISM, along with an abstract indicating purpose, findings, and conclusions. Abstracts should be kept under 100 words for publication in the annotated bibliography.

If you wish to receive future issues of WORLD RESEARCH IN ALCOHOLISM, and have not already mailed your request, please write: State of Illinois, Department of Public Welfare, Division of the Alienist, 912 South Wood Street, Chicago 12, Illinois.

- BACON, S. D. (sociol., Yale Univ., New Haven, Conn.): Inebriety, social integration, and marriage. IV. Significance of the marital association, and of social integration in general, for the study of inebriety. Quart. J. Stud. Alc. 5: 303-39, 1944. 25 ref. "Following a description and statistical analysis of the sociological characteristics of 1200 arrested inebriates (in Pt. I). including age, sex, marital status, residential mobility, occupational history, recreational practices and educational background, and also description of the latter four characteristics for those inebriates of different marital status (control groups being utilized in all comparisons), the present paper (Pt. II) considers the significance of the findings and suggests further steps in research in the etiology of excessive drinking and in therapy. Literature which apparently covered sociological data is reviewed. ordinary marital status of the inebriates is discussed in terms of the sociopsychological functions of marriage. The part played by association with other persons in the development of a balanced personality is emphasized, especially in relation to the period preceding the onset of inebriety. As the first systematic study of excessive drinkers from a sociological viewpoint it emphasizes the importance of marital factors in associational experience and proposes the establishment of a classification on this basis to be verified by therapeutic testing and follow-up studies." -- Author in Biol. Abstr.
- 187. BALES, R. F. (sociol., Yale Plan Clinic, Hartford, Conn.): The therapeutic role of Alcoholics Anonymous as seen by a sociologist. Quart. J. Stud. Alc. 5: 267-78. 1944. "Two groups of elements can be distinguished in the psychological state of the compulsive drinker: underlying needs for adjustment; a nucleus of obsessive thoughts and feelings that drinking and only drinking will satisfy these needs for adjustment. The latter element may be called the 'fixation.' Thus, types of therapy may be analyzed in terms of the way they aid the individual in (1) reducing the underlying needs for adjustment; (2) providing other means or activities for satisfying the needs; (3) breaking up or dissipating the fixation; and (4) acquiring effective thoughts and feelings to combat the Alcoholics Anonymous approaches (3) most effectively because the constant process of confession which goes on in the group reveals the defenses protecting the fixation, brings the fixation itself to light in its many rationalized forms and exposes the needs it serves. It is also extremely effective in approach (4) because it is a solidary primary social group which is able to hold the individual by positive identification in such a way as to make the inhibitions which it advocates actually effective in his personality. Alcoholics Anonymous is only partially effective in approach (1) and needs to cooperate closely with other agencies to attack serious underlying maladjust-Certain normal processes of change in the social structure of local groups potentially threaten the therapeutic process but these can be minimized by proper handling." - Author in Biol. Abstr.
- 188. BERKWITZ, N. J. (div. of nerv. ment. dis., Univ. of Minnesota, Minneapolis):

 The treatment of delirium tremens with faradic shock therapy; a new approach based upon the psychobiological concept. Ann. Int. Med. 16: 480-93, 1942.

 29 ref., 2 tables, 2 fig. "The symptom-complex of delirium tremens results from psychogenic as well as physical conditions. The contributory factors are: a) the personality with its constitutional and acquired components; b) the toxic effects of alcohol; c) malnutrition; and d) sudden withdrawal of alcohol. The precipitating factor may be an emotional shock, injury, or infection. The routine treatment has been directed largely toward supportive measures, but the basic considerations of the psychopathology have been largely neglected. Experience has shown that the necessary 'protective' measures (chemical and physical restraints) often aggravate or prolong the acute psychotic symptoms in most cases and, therefore, lessens the need of

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these undesirable protective measures. Seventy-six cases of delirium tremens were given the same routine medical treatment. Forty-three of these, receiving only the routine treatment, required strong sedation for an average of 5 days. Thirty-three, receiving faradic shock therapy in addition to the routine treatment, required strong sedation for an average of 2.2 days."

- 189. BOTTURA, C., PFUHL NEVES, D., and MARQUES DE ASSIS, L. (Fac. Med., Univ. Sao Paulo, Brazil): Tratamento do alcoolismo agudo pela glicose e insulina. (Dextrose and insulin therapy of acute alcoholism.) Rev. Hosp. clin. 2: 269-76, 1947. 15 ref. "According to literature, 90% of absorbed alcohol is oxidized by the organism. Glucose, insulin, nicotinic acid, and thiamine are involved in this process. Treatment of acute alcoholic intoxication should be, therefore, directed to increase alcohol oxidation, which mechanism is not well known. The authors used glucose, insulin, nicotinic acid, and thiamine in six cases of acute alcoholic intoxication with good results. Administration of glucose should be repeated many times during treatment because these patients often develop hypoglicemia. No conclusions are possible at present regarding the effect of this method of treatment on the rate of alcohol disappearance in blood because the authors have no data on a similar group of patients receiving no treatment."
- 190. CAVAILLON, A. (dir. gen., Health, Ministry of Public Health, Paris, France):
 Report on alcoholism. United Nations, World Health Organization, Interim
 Commission. WHO.IC/104, Aug. 30, 1947. 66 pp. (Translation unrevised
 text.) A preliminary report aimed at drawing the attention of the world
 Health Organization to the gravity of the problem of alcoholism. Among the
 issues discussed are: 1) the physiological and pathological aspects of alcoholism; 2) the social aspects of alcoholism; 3) steps for restriction of
 production, sale, and consumption of alcohol; and 4) steps for social protection against alcoholism.
- 191. CHAIKOFF, I. L., ENTENMAN, C., GILLMAN, T., and CONNOR, C. L. (physiol. and path., Univ. of Calif. Med. Sch., Berkeley and San Francisco): Pathologic reactions in the livers and kidneys of dogs fed alcohol while maintained on a high protein diet. Arch. Path. 45: 435-46, 1948. 21 ref., 2 tables, 8 fig. "Severe hepatic and renal injury developed in dogs receiving alcohol while being maintained on a high protein diet. Whether the pathologic changes described were due to the alcoholization or to the associated malnutrition could not be determined. The most common hepatic lesion was severe fatty change with or without centrolobular hemorrhage and fibrosis. Centrolobular hepatic fibrosis was superimposed on the fatty changes in the livers of 7 of the 12 dogs studied. In 2 dogs this fibrosis was severe enough to result in such gross structural distortion as to be regarded as frank cirrhosis. Periportal fibrosis was associated with centrolobular fibrosis in 2 dogs. genesis of these lesions is discussed, and the possible role of circulatory disturbances in their causation is stressed. Glomerular damage and an unusual type of tubular damage were also detected in the kidneys of these dogs. Possible causes of these renal lesions are discussed."
- 192. CORWIN, E. H. L., and CUNNINGHAM, E. V. (New York Acad. Med., New York): Institutional facilities for the treatment of alcoholism. Quart. J. Stud. Alc. 5: 9-85, 1944. 38 ref. (Reprinted as Research Report No. 7, Research Council on Problems of Alcohol, New York: 1944). "The treatment of alcohol addiction was investigated, by questionnaire and direct survey, in public and private general hospitals, mental-disease hospitals, sanatoriums, nursing homes, and psychiatric clinics. A marked resistance to accepting al-

coholic patients was found in most general hospitals. It is concluded that hospital facilities for the care and treatment of alcoholics in the U. A. are scanty and inadequate and that those which exist are not always utilized to best advantage." — Corwin in Biol. Abstr.

- 193. COX, A. J., JR. (path., Stanford Univ. Sch. Med., San Francisco, Calif.): Gastritis in relation to alcoholism and cirrhosis of the liver. Stanford Med.

 Bull. 6: 223-6, 1948. 17 ref., 1 table. "In stomachs obtained at autopsy from 43 patients with cirrhosis of the liver there was no greater incidence or severity of chronic atrophic gastritis than in a comparable group of patients without cirrhosis. No justification for the use of the term 'chronic alcoholic gastritis' has been found."
- GOLDBERG, L., and STÖRTEBECKER, T. P. (pharm., Karolinska Inst., Stockholm, Swe-194. den): Antinarcotic effect of estrone on alcohol intoxication. Acta physiol. Scandinav. 5: 289-96, 1943. 31 ref. "The effect of estrone treatment on ethyl Intoxication in castrated rabbits was studied, the degree of intoxication being established by means of reflex criteria and referred to the blood alcohol level. Conclusions: (1) Estrone treatment diminishes the degree of alcohol intoxication, Störtebecker's 1937 observation being confirmed. (2) After estrone treatment the animals only attain the same degree of intoxication at a higher blood alcohol level. The difference in blood alcohol concentration has been used as a measure for the antinarcotic effect of estrone. (3) The general alcohol metabolism is not affected by estrone, the oxidation rate B and the distribution factor r being unaltered. The effect of estrone on alcohol intoxication must thus be searched for elsewhere, e. g., in the central nervous system. (4) The varying resistance to alcohol depends on the hormonal state of the individual, and the amount of estrogens in the organism seems to be an important cause."
- KIENE, H. E., STREITWIESER, R. J., and MILLER, H. (Charles V. Chapin Hosp., 195. Providence, R. I.): The role of vitamin B1 in delirium tremens. J. Amer. med. Ass. 114: 2191-4, 1940. "The role of vitamin B1 in delirium tremens was studied in 10 carefully selected patients suffering from delirium tremens. Patients were separated into two groups of 5. Five patients were given whisky and various amts. of vitamin B1 administered intravenously. The remaining 5, used as controls, were treated symptomatically; no emphasis was put on vitamin intake. Aside from these differences in therapy both groups received the same hospital care. The 5 who were given vitamin By and whisky showed a more rapid improvement in their physical and mental states than the controls. The average length of time for the acute symptoms to disappear in the treated group was 2.4 days as compared with 4.2 days in the controls. The authors believe that these findings indicate that a deficit of vitamin B1 in the brain parenchyma and not alcohol is chiefly responsible for the production of delirium tremens. They are of the opinion that a central (cerebral) neuronitis is caused by a perverted carbohydrate and vitamin B1 relationship, which when treated with adequate vitamin B1 responds more readily than does peripheral polyneuritis of alcoholic origin. Alcohol in the presence of large amts. of intravenous vitamin B1 does not cause a continuation of the symptoms of delirium tremens, and if adequate vitamin B1 is given when alcohol is abruptly withdrawn eventual recovery occurs. In two cases albumin and hyaline casts in the urine were noted on These patients were given whisky plus intravenous vitamin B1 admission. and in 72 hrs. their urine was clear. This was taken to indicate that when vitamin B1 is given with large amts. of whisky, the whisky no longer acts as a kidney irritant." -- Quart. J. Stud. Alc.

- MARDONES. J. AND ONFRAY. E. (Lab. Nutr., Inst. Educ. Fis. Tec., Univ. of Chile, 196. Santiago): Influencia de una substancia de la levadura (elemento del complejo vitaminico B?) sobre el consumo de alcohol en ratas en experimentos de autoseleccion. (Effect of a yeast fraction - part of the vitamin B complex? - on the ad libitum consumption of alcohol by rats.) Rev. chil. Hig. Med. prev. 4: 293-7, 1942. 5 ref., 1 graph, 1 table. "Young rats ... received a basal diet of casein, sugar, olive oil, salt mixture, and cod liver oil supplemented with dried yeast or with yeast which had been heated in an autoclave for 5 hrs. in solution at pH 8 to 9. The animals having the alkaline autoclaved yeast lost appetite and developed skin lesions on the paws. discolouration and loss of hair and signs of polyneuritis. These deprived rats voluntarily consumed greater amts. of the alcohol offered as a 5-20% solution than the control rats having untreated yeast. When the deprived rats were given unheated yeast their alcohol consumption fell. There thus appeared to be some connection between lack of a factor or factors of the vitamin B complex and the desire for alcohol." - Copping in Nut. Ab. Rev.
- MASSERMAN, J. H., and SIEVER, P. W. (Northwestern Univ., Evanston, Ill.): Domi-197. nance, neurosis, and aggression. Psychosom. Med. 6: 7-16, 1944. 23 ref. "Sixteen cats were individually trained to respond to a signal by opening a food box to obtain food. The cats were then paired until one member of each pair became 'dominant' in the food-getting situation. By further pairings a heirarchy of dominance was established in 3 groups of four cats each. dominant members of each heirarchy were then made 'neurotic' in turn by subjecting them to one or more harmless but unexpected air-blasts or electric shocks at the moment of food taking. The behavior modifications so induced and their effect upon the dominance pattern was studied. It was found that aggressive behavior did not appear in a dominant animal until it had been displaced downward in the dominance heirarchy and that, conversely, aggressive behavior diminished when the group dominance of an animal was reestablished. The neurotic animals were then given injns. of Na amytal, morphine and ethyl alcohol. These drugs had the temporary effect of relieving the animal from his feeding inhibitions, of restoring dominance and of abolishing deviate and frustrated aggressivity. It was found that, in general, the relative doses required for the temporary relief of the neurotic inhibitions varied in proportion to the intensity and fixity of the neurosis in the individual animal." -- Galt in Biol. Abstr.
- 198. RUSKIN, A., RAVEL, J., BEARD, B. (med. and neuropsychiat., Univ. of Texas Sch. of Med., Galveston): The electrocardiogram in mental disease. Biol. Med. 5: 232-45, 1947. 4 graphs, 1 table. "We reviewed the electrocardiograms of 100 severe mental cases, hospitalized on the Neuropsychiatric Service, and thoroughly studied to rule out any organic disease. The ages of the patients varied from 14 to 50. ... The major EKG findings for the entire group of 100 cases are listed in Table I. ... There were 9 cases of personality defects, some labeled as of the constitutional psychopathic inferior (C.P.I.) type, with or without morphine, alcohol, or isonipecaine (demerol) addiction. ... None of them showed even suggestive EKG abnormalities, except, possibly, one C.P.I. case who had a deep, 4 mm., Q1. ... The 9 cases of C.P.I., maladjustment, or drug addiction were evidently least emotionally upset - hence, perhaps, the lack of suggestive EKG findings. Alcoholics, without pellagra, were similarly found to be free from EKG abnormalities by Feil (1936)."
- 199. SIMON, B., O'LEARY, J. L., and RYAN, J. J. (NP serv., Mason Gen. Hosp., Brentwood, N. Y.): Cerebral dysrhythmia and psychopathic personalities. A study of ninety-six consecutive cases in a military hospital. Arch. Neurol. Psy-

chiat., Chicago 56: 677-85, 1946. 9 ref. "The authors studied the encephalograms in 96 patients in whom a diagnosis of constitutional psychopathic state was made by three competent psychiatrists. Clinical manifestations on which this diagnosis was based included alcoholism, drug addiction, The diagnostic criteria are described in detail. ... The percentage of abnormal records did not greatly exceed the reported incidence of abnormality in normal control groups studied by different investigators. Nor was there any tangible evidence of increased abnormality in the EEGs associated with the various manifestations of psychotherapy of the severest degree, as compared with the milder cases. In particular, with respect to manifestations of aggression, overt asocial behavior, absence without leave, alcoholism, drug addiction, and homosexuality, there was no difference in the incidence of abnormality between patients with negative and those with positive histories." — Guttmann in Abstr. World Med.

- 200. STATE LEGISLATION. "The South Carolina legislature set up a special committee to study the feasibility of establishing an institution for the observation and treatment of chronic alcoholics." Surv. Midmonth. 84:249, 1948.
- 201. "The first of several envisaged state research and treatment centers will be set up at the Medical College of Virginia, in Richmond, where alcoholic patients will receive both hospital and clinic care." Surv. Midmonth. 84: 215-6, 1948.
- 202. "In February 1948 Dr. A. J. Carlson and Stanley Rappeport of Research Council on Problems of Alcohol testified before the Joint State Government Commission of the Pennsylvania legislature on the need for legislation to cope with problem drinking. Dr. Carlson pointed out that 'since the key to this illness is compulsive drinking ... establishment of treatment facilities for the rehabilitation of problem drinkers is not adequate. We must also make provision for research into the causes and prevention of this malady. Mr. Rappeport presented an 8-point program designed to guide the framing of this type of legislation. Recommendations included: substitution of the general hospital for the jail as the screening and referral center for all alcoholics: treatment of the emotionally unstable, neurotic, and normal excessive drinker at the general hospital; referral of patients whose abnormal drinking is purely symptomatic to existing mental hospitals; establishment of farm or industrial colonies for 'Skid Row' alcoholics; utilization of existing medical schools and affiliated hospitals for research into the causes, treatment and prevention of problem drinking; establishment of a program for controlling alcoholism within the framework of the public health agency; and vesting legal authority for the control of the alcoholic in the health agency, not in the police department." Surv. Midmonth. 84:216, 1948.
- 203. TEXON, M. (Knickerbocker Hosp., Alcoholic Pavilion, New York, N. Y.): Medical aspects of an alcoholic service in a general hospital. New York Med. 4: 22-4, June 5, 1948. "This study shows the incidence of medical conditions, particularly liver pathology, in alcoholics. Fatty liver is the most common clinical diagnosis and appears directly proportional to the duration of alcoholism. The associated dietary lack is of great significance. The data presented here demonstrate the need for further work in this field. We hope that suitable laboratory facilities, needle biopsies for pathological correlation, and follow-up examinations will be made possible."
- 204. VAN AMBERG, R. J. (clinical services, New York Hosp., Westchester Div., White Plains, N. Y.): A study of 50 women patients hospitalized for alcohol addiction. Dis. nerv. System 4: 246-51, 1943. 9 ref. "Fifty female patients

admitted to the Westchester Division of New York Hospital between 1934 and The diagnoses were: alcoholism without psychosis, 30; 1940 were studied. Korsakoff's syndrome, 6; acute hallucinosis, 6; alcoholic deterioration, 4; delirium tremens, 2; psychopathic personality with alcoholism, 2; involutional psychosis with alcoholism, 1. Average age at time of admission, 40 yrs. Occupations: housewives, 33; actresses, 7; business women, 5; unemployed, 5. Family histories revealed high incidence (30%) of maladjustment among the fathers; most of the mothers had been responsible and affectionate. About one-half of the patients occupied intermediate positions among their siblings; only one had been an only child. Majority were adequately endowed intellectually, had lived in comfortable surroundings and enjoyed a healthy childhood. No marked differences were observed between the personalities of the psychotic and nonpsychotic patients. The majority had made good ambivert and extrovert adjustments. Their social activities and interests were considered average or better; but only 9 were satisfied with their lives. Reasons for drinking given by the patients included: difficult marital situation, 19; involutional factors, 16; loss of a close relative, 10; economic insecurity, 7. Social drinking in 48 instances had started at about the age of 20 and was considered as a contributory cause in 22 cases. In 30 of the patients there had been marked depressive or anxiety feelings prior to drinking. Average age at which drinking became heavy was given as 30, and incapacitating, as 35. Treatment consisted of physical rehabilitation followed by occupational therapy, social activities, and physical education. Thirty of the patients were hospitalized for less than 3 months; 17 left within 4 weeks. The 15 who entered voluntarily stayed, on the average, between 2 and 3 months; those who were committed remained an average of 4.5 months. Although 38 cooperated fully in the hospital routine, only 16 participated in the effort to understand their chief problems. The others resisted the psychotherapeutic approach, and 26 were strongly antagonistic when they were discharged. At the time of reporting, all of the patients had been out of the hospital more than a year. Five had abstained for 1 year or more; 2 of these had then resumed light drinking. Four others had modified their drinking so that further hospitalization had not been necessary. Thirty-seven had resumed pathologic drinking. Eight of the 9 who were helped had been fully cooperative in psychiatric interviews. Four case histories are presented in detail." - Quart. J. Stud. Alc.

WILLIAMS, R. J. (Biochem. Inst., Univ. of Texas, Galveston): 205. Biochemical approach to individuality. Science 107: 459, 1948. A program of investigation now under way indicates that what correspond to 'inborn errors' are commonplace. Even in the early stages of investigation, which employs microbiological, chromatographic, and spectographic methods for analyses of body fluids, it seems clear that every individual possesses a distinctive 'metabolic personality.' By scientific means we can reasonably hope to duplicate the feat of the hound-dog, i.e., identify individuals by their metabolic products. Acquaintance with individual metabolic patterns will lead eventually to their effective classification. The implications of this type of study are far-reaching because one's susceptibility to numerous diseases, including alcoholism, drug addiction, and mental disorders, is doubtless greatly influenced by his type of metabolic personality. Further. significant correlations between metabolic personalities and psychological personalities will doubtless eventually appear. ... Only by supplementing the psychological approach with a biochemical and physiological one and by paying attention to individuality can we make a satisfactory coordinated scientific attack on the problem of human nature."